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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,277	09/30/1999	DONALD P. PAZEL	YO9-99-302	5131

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EXAMINER
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OPIE, GEORGE L

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/409,277	Pazel et al.	
	<b>Examiner</b>	<b>Art Unit</b>	
	George L. Opie	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ☐ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ☐ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ☐ is/are objected to.
- 8) ☐ Claim(s) ☐ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ☐ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ☐ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ☐.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

#### Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)                      17) ☐ Interview Summary (PTO-413) Paper No(s). ☐.
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      18) ☐ Notice of Informal Patent Application (PTO-152)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ☐.
- 19) ☒ Other: Text Doc for USP6,446,081

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## DETAILED ACTION

This Office Action is responsive to the request for continued examination and Applicant's 21 December 2004 Amendment.

### **1. Request for copy of Applicant's response on floppy disk:**

Please help expedite the prosecution of this application by including, along with your amendment response in paper form, an electronic copy in WordPerfect, Microsoft Word, or in ASCII text format on a 3½ inch IBM format floppy disk. Please include all pending claims along with your responsive remarks. Only the paper copy will be entered -- your floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory; however, it will help expedite the processing of your application. Your cooperation is appreciated.

### **2. Obviousness-type double patenting Rejection**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. CIT. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Uogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Claims 1-9 are rejected under obviousness-type double patenting as being unpatentable over claims 1-9 of co-pending application 09/639,931, which was filed 17 August 2000, and issued as U.S. Patent 6,683,624.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed differences are obvious, in particular the language which recites elements of the patented invention such as: "programming objects as graphical elements, wherein programming properties of programming objects are reflected through graphical properties of graphical elements," "detecting a change in a state of a data element representing a programming object", "determining graphical aspect changes that apply to graphical elements of a programming object appropriate for a change in state" and "applying the graphical aspect changes to corresponding graphical elements, wherein the graphical aspect changes include changes in color, position and size".

The claimed differences would be obvious to a programmer of ordinary skill because the instant claims are merely broader variations of the claims

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recited in the earlier patented invention, e.g., **independent claim 1 of the instant application claims:**

A computer implemented method of visual representation of programming objects as graphical elements, wherein programming program properties of said programming objects are reflected through graphical properties of graphical elements, the method comprising the steps of  
detecting a change in a state program property of a data element representing a programming object in visual representation and shown visually on a display device as one or more graphical elements, wherein the data element represents graphical elements represent the programming object as graphical elements and program properties of programming objects are reflected through graphical element properties;  
determining graphical aspect changes that apply to graphical elements of the programming object appropriate for the change in state a program property of the programming object; and  
applying the graphical aspect changes to corresponding graphical elements, wherein the graphical aspect changes include changes in color, position and size.

**as opposed to**

A computer implemented method of visual representation of programming objects as graphical elements, wherein programming properties of programming objects are reflected through graphical properties of graphical elements, the method comprising the steps of:  
detecting a change in a state of a data element representing a programming object in visual representation and shown visually on a display device, wherein the data element represents a programming object as graphical elements and programming properties of programming objects are reflected through graphical element properties;  
determining graphical aspect changes that apply to graphical elements of a programming object appropriate for a change in state;  
applying the graphical aspect changes to corresponding graphical elements, wherein the graphical aspect changes include changes in color, position and size; and  
resolving alternative programming states of said programming object with a convergence operator defined on semantic state space of said programming object

**as claimed in independent claim 1 of the previously patented invention.**

Because the instant claims are mere variations on the limitations from the set of elements and functions claimed in the previously patented invention, such modifications would be obvious to a programmer of ordinary skill.

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### 3. Terminal Disclaimer

The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. In re Vogel, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 C.F.R.

1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. 1.78(d).

4. The U.S. Patents used in the art rejections below have been provided as text documents which correspond to the U.S. Patents. The relevant portions of the text documents are cited according to page and line numbers in the art rejections below. For the convenience of Applicant, the cited sections are highlighted in the *text documents*.

### 5. Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Walton et al. (U.S. Patent 5,883,639) in view of Preston (U.S. Patent 6,446,081).

As to claim 1, Walton teaches a computer implemented method of visual representation of programming objects as graphical elements (visual software engineering ... graphical objects, p5 12-40) wherein programming properties of programming objects are reflected through graphical properties of graphical elements (screen objects ... reflect changes in external data, p4 27-51) the method comprising the steps of:

detecting a change in a state of a data element representing a programming object in visual representation and shown visually on a display device (VSE

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object tracks a behavior function such that when a value change occurs the VSE object can change its graphical representation and update itself on the display, p13 40-52) wherein the data element represents a programming object as graphical elements and programming properties of programming objects are reflected through graphical element properties (hierarchical, object-oriented approach is used to allow properties to be attached to all "instances" of the graphics elements, p4 27-51)

determining graphical aspect changes that apply to graphical elements of the programming object appropriate for the change in state (define the behavior of an object in response to an input value from a target application or some other system event, p7 35-47) and

applying the graphical aspect changes to corresponding graphical elements (transformation to apply to the object to get the object into that state, p21 39-43) wherein the graphical aspect changes include changes in color, position and size (graphics transformation of the object, such as change of color, move, rotate, scale ..., p9 18-25).

Walton does not explicitly disclose the limitation of a graphical property representing a programming object's property.

Preston teaches the program properties of the programming objects are reflected through graphical elements (the shaped displayed is selected so as to match the recognized characteristics ... to indicate whether it is an entity or a state of affairs, p19 48-51). It would have been obvious to combine Preston's display attributes with the VSE system taught by Walton because the "visual display to represent the output data", p17 32-39 would enable users to more easily ascertain/comprehend the functional components requisite in the specified program.

As to claim 2, Walton (p17 47 – p18 4) teaches traversing a list of graphical aspect references to acquire a graphic aspect for the data element and determining whether the graphic aspect applies to the change in state.

As to claim 3, Walton (p21 19-24) teaches the programming object logically contained in another object.

As to claims 4-5, Walton (p10 1-20) teaches that more than one visual representation is defined and may be used for a programming object.

As to claims 6-7, Walton (p11 28-33) teaches a visual representation of a superclass of the programming object is used as a visual representation for a subclass of the programming object.

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As to claim 8, note the rejection of claim 1 above. Claim 8 is the same as claim 1, except claim 8 is an apparatus claim and claim 1 is a method claim.

As to claim 9, note the rejection of claim 1 above. Claim 9 is the same as claim 1, except claim 9 is a computer program product claim and claim 1 is a method claim.

7. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Specifically, the below reference(s) will also have relevancy to one or more elements of the Applicant's claimed invention as follows:

U.S. Patent No. 6,684,385 to Bailey et al. which teaches the program objects with property attributes indicative of functionality;

U.S. Patent No. 6,366,300 to Ohara et al. which teaches the visual programming system for displaying processes through behavioral images;

U.S. Patent No. 6,182,024 to Gangopadhyay et al. which teaches the object properties in correlation with program operations; and,

U.S. Patent No. 6,052,515 to Bruckhaus which teaches the program images for showing aspects of an object-oriented application.

#### **8. Response to Applicant's Arguments:**

Applicant's arguments, dated 21 December 2004, have been considered but are moot in view of the new grounds of rejection.

#### **Contact Information:**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private-PAIR or Public-PAIR.

Status information for unpublished applications is available through Private-PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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All responses sent by U.S. Mail should be mailed to:

**Commissioner for Patents**

**PO Box 1450**

**Alexandria, VA 22313-1450**

Hand carried responses should be delivered to the *Customer Service Window* (Randolph Building, 401 Dulany Street, Alexandria, Virginia 22314) and, if submitting an electronic copy on floppy or CD, to expedite its processing, please notify the below identified examiner prior to delivery, so that the Applicant can "handoff" the electronic copy directly to the examiner.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at **(571) 272-2100**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at (571) 272-3766 or via e-mail at [George.Opie@uspto.gov](mailto:George.Opie@uspto.gov). Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.

  
**MENG-AL T. AN**  
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